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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,728	05/22/2001	Gary K. Starkweather	1026-037/MMM 160226.1	1235

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EXAMINER	
LE, BRIAN Q	

ART UNIT	PAPER NUMBER
2623	4

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/862,728	Applicant(s) STARKWEATHER, GARY K.	
	Examiner Brian Q Le	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-26 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 22 May 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by DeVito U.S. Patent No. 5,825,943.

Regarding claim 1, DeVito teaches a document digitizing method of digitizing a document in printed form (column 3, lines 9-12 and FIG. 1), comprising:

Optically scanning the document (FIG. 3, element 200);

Forming (FIG. 2) and storing (memory) a digitized image file from the optically scanned document (FIG. 1, element 106 and column 3, lines 15-18);

Optically recognizing under computer control characters in the optically scanned document (column 3, lines 45-50); and

Forming and storing a text file of the optically recognized characters in document (column 3, lines 24-30).

For claim 2, DeVito further teaches the method which the document includes plural pages and a separate digitized image file is formed for each page of the document (column 2, lines 32-37).

Referring to 3, DeVito also teaches the method which a separate text file is formed for each page of the document (display portion of data set shown for each page) (column 2, lines 30-37).

For claim 4, DeVito discloses the method which the document includes plural pages and a separate text file is formed for each page of the document (column 2, lines 30-37).

Regarding claim 5, DeVito teaches the method which each digitized image file is correlated with a corresponding text file (text data set with correlated information to each page) (FIG. 2, elements 202, 204 and 206).

For claim 6, DeVito further discloses the method which corresponding digitized image files and text files are correlated by being assigned common names and are distinguished by appropriate file extensions (data stored by some predetermined or user defined rules) (column 2, lines 16-29).

Regarding claim 7, DeVito further teaches the method which corresponding digitized image files and text files are correlated by a mapping table or algorithm (TIC Table) (column 2, lines 39-41).

Referring to claim 8, DeVito shows the method comprising retrieving a digitized image file for a document based upon a text string (search phrase for the text file) in the text file corresponding to the digitized image file (column 2, lines 21-28).

For claim 9, DeVito includes the teaching of the method which the digitized image file is compressed and of a lossless image file format (column 3, lines 55-60).

Regarding claim 10, DeVito further discloses the method which the text file is of a simplified file format based upon ASCII characters (column 2, lines 13-15).

Referring to claim 11, DeVito also discloses the method which optical character recognition is applied to all text characters in the optically scanned document (column 2, lines 12-15).

Regarding claim 12, please refer back to claim 1 for the explanation. In addition, DeVito teaches the computer readable medium to process the claimed limitations (FIG. 1, element 106).

For claim 13, DeVito teaches the data structure further comprising correlated file indicators for the digitized image file and the text file representing the optically scanned document (correspondence table) (FIG. 2, element 206).

Regarding claim 14, please refer back to claim 6 for further explanation.

For claim 15, please refer back to claims 2-5 for further explanation.

Regarding claims 16-17, please refer back to claims 9-10 respectively for further explanation.

For claim 18, please refer back to claims 1 and 12 for further explanations.

Referring to claim 19, DeVito teaches the method, which providing access to the digitized image files includes allowing a user to selectively display any of the digitized image files corresponding to the text files identified as having the selected text string (FIG. 2, elements 208, 210, 212, 214, and 216).

Regarding claim 20, please refer back to claim 6 for the explanation.

For claim 21, DeVito teaches the method in which searching the text files to identify any having a selected text string includes specifying multiple separate text strings and searching the text files in a batch to identify any text files having any of the separate text strings (FIG. 2, elements 210, 212, and 214).

For claim 22, DeVito teaches the method in which the text files have file names, the method further comprising storing the file names of the text files identified as having the selected text string (column 2, lines 38-44).

For claim 23, please refer back to claim 1 for the teaching. Also, DeVito teaches the software to perform claimed limitations (column 3, lines 24-25).

Regarding claims 24, please refer back to claims 2-5 for the teaching.

For claim 25, please refer back to claim 6 for the explanation.

For claim 26, please refer back to claim 8 for the explanation.

CONCLUSION

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to image, OCR processing and retrieval:

U.S. Pat. No. 6,341,176 to Shirasaki, teaches a method for character recognition.

U.S. Pat. No. 5,168,565 to Morita, teaches a method for document retrieval system.

U.S. Pat. No. 5,765,176 to Bloomberg, teaches the performing document image management tasks using an iconic image having embedded encoded information.

U.S. Pat. No. 6,182,090 to Peairs, teaches a method for pointing to documents electronically using features extracted from a scanned icon representing a destination.

U.S. Pat. No. 5,623,679 to Rivette, teaches a method for creating and manipulating notes each containing multiple sub-notes, and linking the sub-notes to portions of data objects.

U.S. Pat. No. 5,133,024 to Froessl, teaches a method for an image data bank system with selective conversion.

U.S. Pat. No. 6,389,163 to Jodoin, teaches a method for automatic image segmentation using template matching filters.

U.S. Pat. No. 6,480,838 to Peterman, teaches a method for searching electronic documents created with optical character recognition.

U.S. Pat. No. 6,687,404 to Hull, teaches an automatic training of layout parameters in a 2D image model.

Story et al. "The RightPages image-based electronic library for alerting and browsing", I.E.E.E. Computer, Volume 25, pages: 17-26, September 1992.

Nagy et al. "A Prototype Document Image Analysis System for Technical Journals", I.E.E.E. Computer, Volume 25, pages: 10-22, July 1992.

O'Gorman, "Image and Document Processing Techniques for the RightPages Electronic Library System", I.E.E.E. Pattern Recognition, Volume 2, pages: 260-263, August 1992.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 703-305-5083. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC Customer Service whose telephone number is 703-306-0377.

BL
June 1, 2004

SAMIR AHMED
PRIMARY EXAMINER